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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/868,107	10/12/2001	Heikki Einola	875.0010USU	5728
29683	7590	12/15/2005	EXAMINER	
HARRINGTON & SMITH, LLP 4 RESEARCH DRIVE SHELTON, CT 06484-6212			COLIN, CARL G	
			ART UNIT	PAPER NUMBER
			2136	
DATE MAILED: 12/15/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/868,107	Applicant(s) EINOLA ET AL.	
	Examiner Carl Colin	Art Unit 2136	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 9/22/2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 and 20-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 and 20-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 18 January 2005 is: a) ☒ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 9/22/2005 has been entered.

Response to Arguments

2. In response to communications filed on 9/22/2005, applicant amends claims 1 and 9-14, and cancels claims 15-19. The following claims 1-14 and 20-23 are presented for examination.

2.1 In response to communications filed on 9/22/2005, the amendment to the claims has been considered and the objection has been withdrawn.

2.2 Applicant's remarks, pages 6-13, filed on 9/22/2005, with respect to the rejection of claims 1-23 have been fully considered but they are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3.1 **Claims 1-6, 8-14, and 20-23** are rejected under 35 U.S.C. 102(e) as being anticipated by US Patent 5,199,069 to **Barrett et al.**

3.2 **As per claim 4, Barrett et al** discloses a method of ciphering in a communication network comprising a user equipment, an access network and a plurality of core networks, wherein said user equipment is configured to be simultaneously in communication with at least two of said plurality of core networks, said method comprising: communicating separate ciphering parameters to said access network (controller) (column 3, lines 25-35), from said at least two of said plurality of core networks, for example (see column 2, line 60 through column 2, line 52); selecting one of said separate ciphering parameters for ciphering the communications between said user equipment and said at least two of said plurality of core networks (see column 2, line 60 through column 2, line 52); **Barrett et al** discloses being able to receive separate encryption algorithms from at least two of the plurality of entities and making a selection of one of the encryption algorithms for ciphering communication to different groups of entities.

As per claims 8 and 9, Barrett et al discloses a controller 114 that meets the recitation of an access network and access network element comprises means for receiving separate ciphering parameters and means for selecting one of said separate ciphering parameters as indicated in claim 1. Therefore, claims 8-9 are rejected on the same rationale as the rejection of claim 1.

As per claim 1, claim 1 contains similar limitations as claim 8 except for including the limitation of wherein said user equipment is configured to be simultaneously in communication with at least two of said plurality of core networks. **Barrett et al** also discloses a user equipment that is configured to be simultaneously in communication with at least two of said plurality of entities (see column 1, line 60 through column 2, line 23).

As per claims 2-3, 5-6, 10, and 13, Barrett et al discloses means for ciphering said communications between said user equipment and said at least two of said plurality of core networks with said selected one of said separate ciphering parameter (column 8, lines 19-67), wherein said ciphering parameter comprises at least one of a ciphering key or a ciphering algorithm, for example (see column 8, lines 5-38).

As per claims 11-12, 20-21, and 22-23, Barrett et al discloses wherein said communications comprising signaling messages and user data (see column 4, lines 55-67).

As per claim 14, Barrett et al discloses the claimed device of claim 9 further comprising a radio network controller in the access network element (see column 3, lines 25-35).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4.1 **Claim 7** is rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 5,199,069 to **Barrett et al** in view of European Patent Application EP-0779760 to **Hamalainen** (*Applicant's Disclosure*).

As per claim 7, Barrett et al substantially discloses an access network comprising plurality of entities dedicated for managing the ciphering of communications with user equipments located in a geographical area allocated to said respective entities. **Barrett et al** discloses selecting and communicating used ciphering parameters to be used for ciphering communications by signaling over said at least two of said plurality of core network (see column

2, line 60 through column 2, line 52). **Barrett et al** discloses an exemplary embodiment using one entity (controller) but was silent about user equipment moving from one geographical area to another area managing by two entities. **Hamalainen** discloses an access network comprising plurality of entities dedicated for managing the ciphering of communications with user equipment located in a geographical area allocated to said respective entities (see figure 7) and discloses using several switching centres that can communicate with each other (column 1, lines 45-50); and further discloses that the invention is advantageous in indicating a change in the cipher mode when a user equipment moves from a geographical area allocated to a first ciphering managing entity to a geographical area allocated to a second ciphering managing entity (column 5, line 14 through column 6, line 4).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the features of Barrett and Hamalainen by using pluralities of entities or switching centres for managing and communicating to each other the cipher mode to be used when a user equipment moves from a geographical area allocated to a first ciphering managing entity to a geographical area allocated to a second ciphering managing entity as suggested by **Hamalainen**. One skilled in the art would have been lead to make such a modification because roaming and handoff are very common in the art and as suggested by **Hamalainen** it would be advantageous to indicate to a user a change in the cipher mode so that users are always aware of whether the data transmission is ciphered or not, and at the same time aware of a change of the cipher mode so that the proper ciphering can be applied to encipher messages (**Hamalainen**, column 5, lines 25-43 and column 9, lines 32-35) and (**Barrett et al**, column 4, lines 29-35 and column 8, lines 19-39).


Conclusion


5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure as the art discloses communication between a mobile user and plurality of networks. 5,555,553 Johnson; 6,434,382 Liu et al; 5,237,612 Raith; US2002/0052206 Longoni; 6,363,151 Linder; 5,325,419 Connolly et al ; 5,537,474 Brown et al.

5.1 Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carl Colin whose telephone number is 571-272-3862. The examiner can normally be reached on Monday through Thursday, 8:00-6:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on 571-272-3795. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Carl Colin
Patent Examiner
December 9, 2005


Primary Examiner
AU 2136
12/12/05